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Environmental Consultants

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President

ENVIRONMENTAL IMPACT STATEMENT

30 HILLVIEW ROAD
BLOCK 3803, LOT 20 & BLOCK 4201, LOTS 1 & 2
TOWNSHIP OF PEQUANNOCK
MORRIS COUNTY, NEW JERSEY

PREPARED FOR:

HILLVIEW MED
30 Hillview Road
Pequannock, New Jersey

PREPARED BY

LRV ASSOCIATES

August 2022

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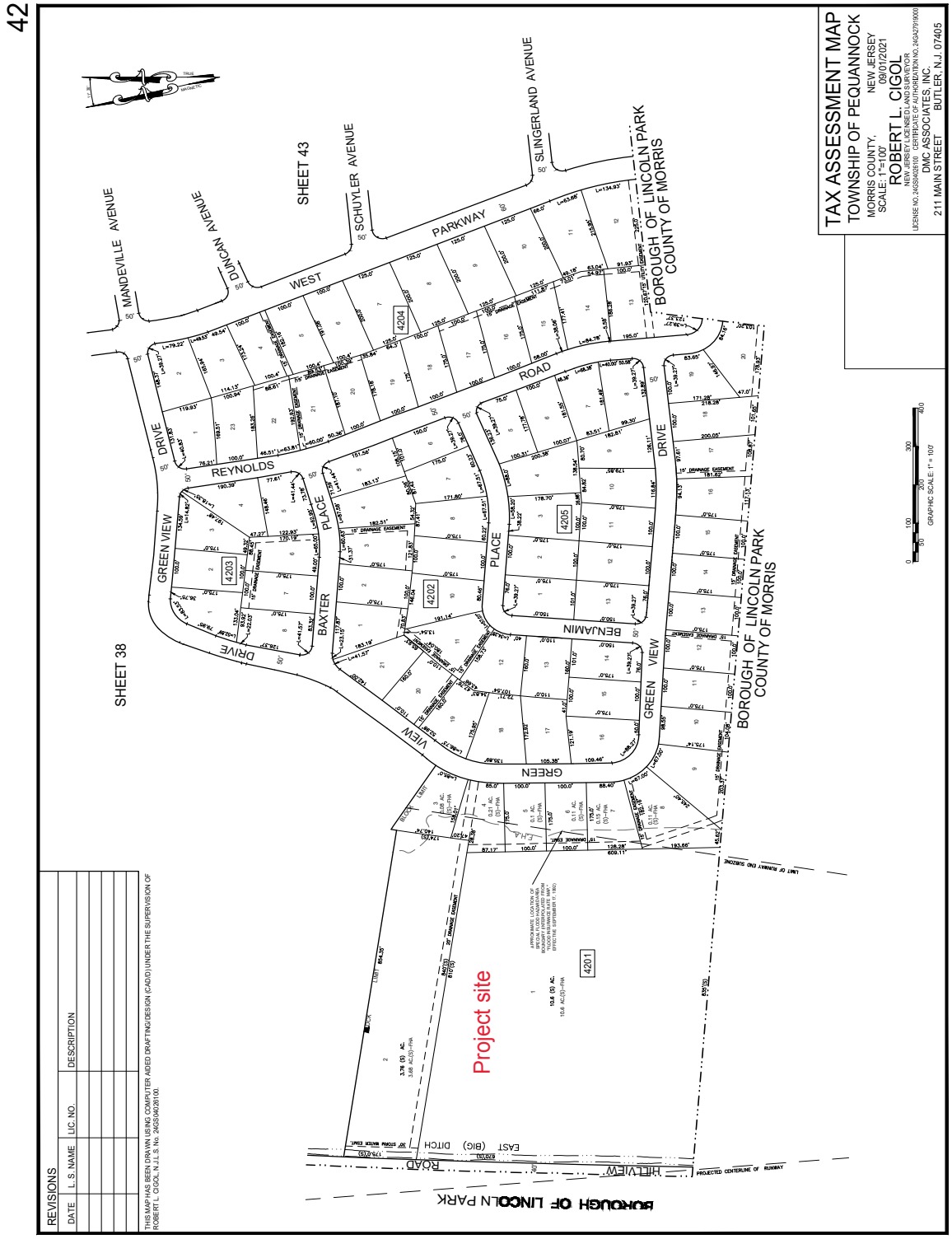
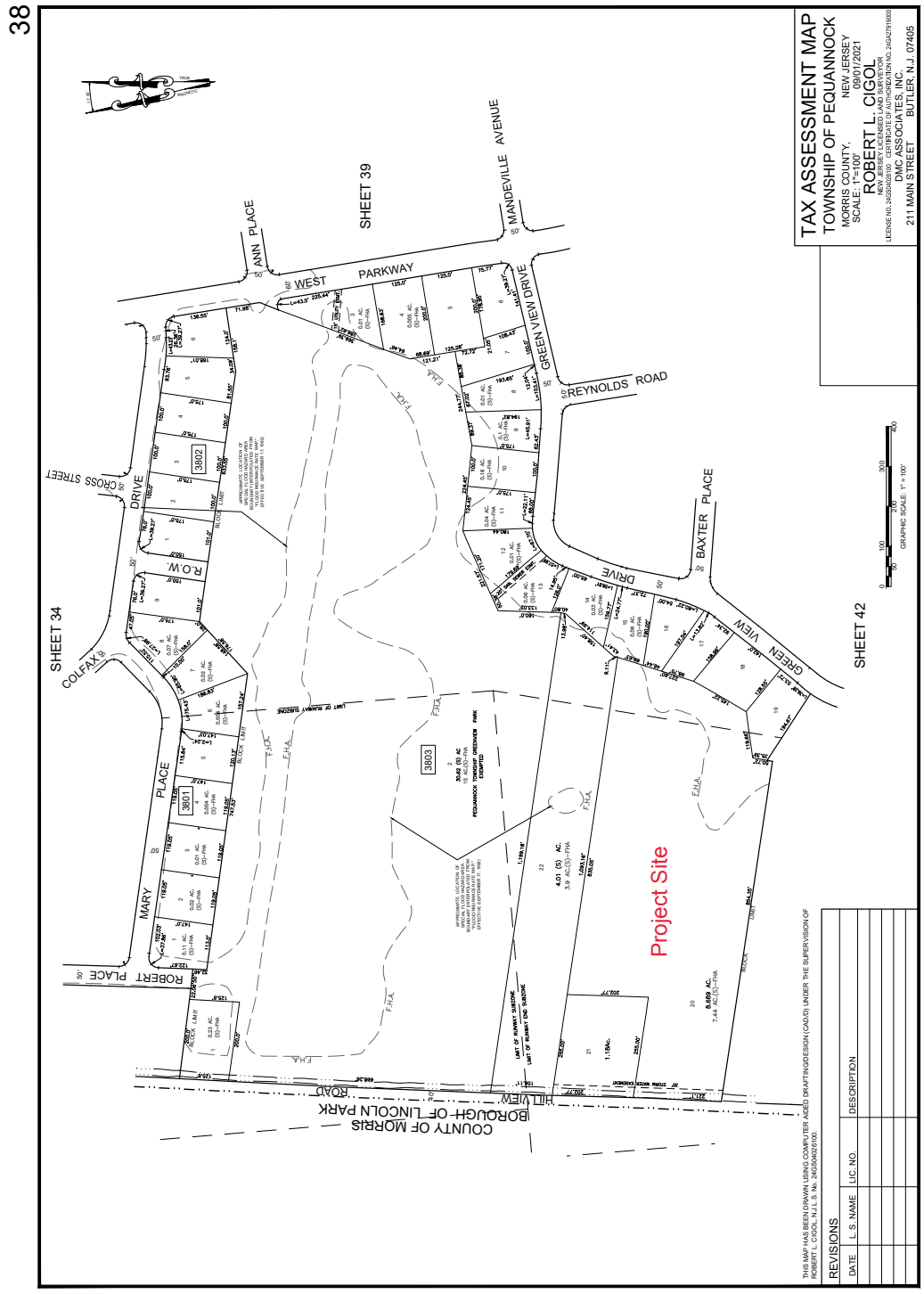
I. INTRODUCTION

The applicant, HillviewMed, has proposed a cannabis cultivation facility on an parcel approximately 23 acres in size. It is located in the Township of Pequannock, Morris County, New Jersey, as is designated as Block 3803, Lot 20, and Block 4201, Lots 1 & 2 on the Pequannock Township Tax Maps. The site is located in the northeast portion of Pequannock Township, across from the Lincoln Park Airport. Pequannock Township is located in the southern portion of Morris County. The property is somewhat rectangular in shape, and has frontage along Hillview Road (Figures 1 & 2).

This Environmental Impact Statement reflects existing and proposed site conditions; provides an environmental assessment of the project; and discusses potential adverse impacts and mitigating measures to protect or offset such impacts. This report should be reviewed in conjunction with the Subdivision Plans submitted by Darmofalski Engineering Assoc. Inc. This report has been prepared in accordance with the provisions of Chapter 144 of the Land Use Ordinance of the Township of Pequannock.


TAX ASSESSMENT MAP
TOWNSHIP OF PEQUANNOCK
MORRIS COUNTY, NEW JERSEY
SCALE: 1"=100'
06/01/2021
ROBERT L. CIGOL
DMC ASSOCIATES, INC.
211 MAIN STREET BUTLER, N.J. 07405
42
42
SHEET 43
SHEET 38
MANDEVILLE AVENUE
DUNCAN AVENUE
SCHUYLER AVENUE
SLINGERLAND AVENUE
PARKWAY
WEST
ROAD
REYNOLDS
DRIVE
GREEN VIEW
PLACE
BAXTER
DRIVE
BENJAMIN
PLACE
GREEN VIEW
DRIVE
GREEN
VIEW
BOROUGH OF LINCOLN PARK
COUNTY OF MORRIS
BOROUGH OF LINCOLN PARK
COUNTY OF MORRIS
4201
4202
4203
4204
4205
Project site
EAST (BIG) DITCH
ROAD
HILLVIEW
PROJECTED CENTERLINE OF RUNWAY
BOROUGH OF LINCOLN PARK
GRAPHIC SCALE: 1" = 100'
REVISIONS
DATE
L. S. NAME
LIC. NO.
DESCRIPTION
THIS MAP HAS BEEN DRAWN USING COMPUTER AIDED DRAFTING/DESIGN (CAD/D) UNDER THE SUPERVISION OF ROBERT L. CIGOL, N.J.L.S. No. 24GS04207100.


38
38
TAX ASSESSMENT MAP
TOWNSHIP OF PEQUANNOCK
MORRIS COUNTY, NEW JERSEY
SCALE: 1"=100' 09/01/2021
ROBERT L. CIGOL
PROFESSIONAL LAND SURVEYOR
LICENSE NO. 24GS04620100 - CERTIFICATE OF AUTHORIZATION NO. 24GA27918000
DMC ASSOCIATES, INC.
211 MAIN STREET BUTLER, N.J. 07405
SHEET 39
SHEET 34
SHEET 42
MANDEVILLE AVENUE
ANN PLACE
WEST PARKWAY
GREEN VIEW DRIVE
REYNOLDS ROAD
BAXTER PLACE
GREEN VIEW DRIVE
COLFAX DRIVE
CROSS STREET
R.O.W.
MARY PLACE
ROBERT PLACE
HILL VIEW ROAD
COUNTY OF MORRIS
BOROUGH OF LINCOLN PARK
3802
3801
3803
Project Site
GRAPHIC SCALE: 1" = 100'
REVISIONS
DATE
L.S. NAME
LIC. NO.
DESCRIPTION
THIS MAP HAS BEEN DRAWN USING COMPUTER AIDED DRAFTING/DESIGN (CAD/D) UNDER THE SUPERVISION OF ROBERT L. CIGOL, N.J.L.S. No. 24GS04620100.

II. INVENTORY OF EXISTING ENVIRONMENTAL CONDITIONS

1. Land Use

The project site currently contains a 119,936 SF greenhouse, and a single family residence. The majority of the site is graveled and/or paved as it operated as a greenhouse/landscaping facility for years. The surrounding land use consists of residential dwellings, agricultural and an airport.

2. Air Quality

According to the 2020 Air Quality Report prepared by the NJDEP Bureau of Air Monitoring, which is the most recent complete report available, the State of New Jersey has been monitoring air quality since 1965. During that time pollution levels have improved significantly as a result of state, regional and national air pollution reduction efforts.

In 2020, the Bureau of Air Monitoring maintained 31 Ambient Air Monitoring Sites in New Jersey. These monitoring sites are designed to fulfill the following monitoring objectives for federal and state regulated pollutants: to measure maximum pollutant concentrations, to assess population exposure, to determine the impact of major pollution sources, to measure background levels, to determine the extent of regional pollutant transport, and to measure secondary impacts in rural areas.

The Air Quality Index (AQI) is a national air quality rating system based on the National Ambient Air Quality Standards (NAAQS). Generally, an index value of 100 is equal to the primary, or health based, NAAQS for each pollutant. This allows for a direct comparison of each of the pollutants used in the AQI (carbon monoxide, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide). The AQI rating for a reporting region is equal to the highest rating recorded for any pollutant within that region. For purposes of reporting the AQI, the state is divided into 9 regions. The Township of Pequannock is located in the Suburban Reporting Region (Region 3), the closest monitoring station in the region is in Chester.

A summary of the 2020 AQI ratings for New Jersey is displayed in the pie chart in Figure 3-2 below. In 2020, there were 219 "Good" days, 141 were "Moderate," and 6 were "Unhealthy for Sensitive Groups." This indicates that in 2020 air quality in New Jersey was good on 60% of days, and moderate on 39% of days. Air pollution was still bad enough on almost 2% of days to potentially affect sensitive people, but 2020 had the lowest number of exceedance days since standards were established.

Figure 3-2
2020 Air Quality Summary by Days

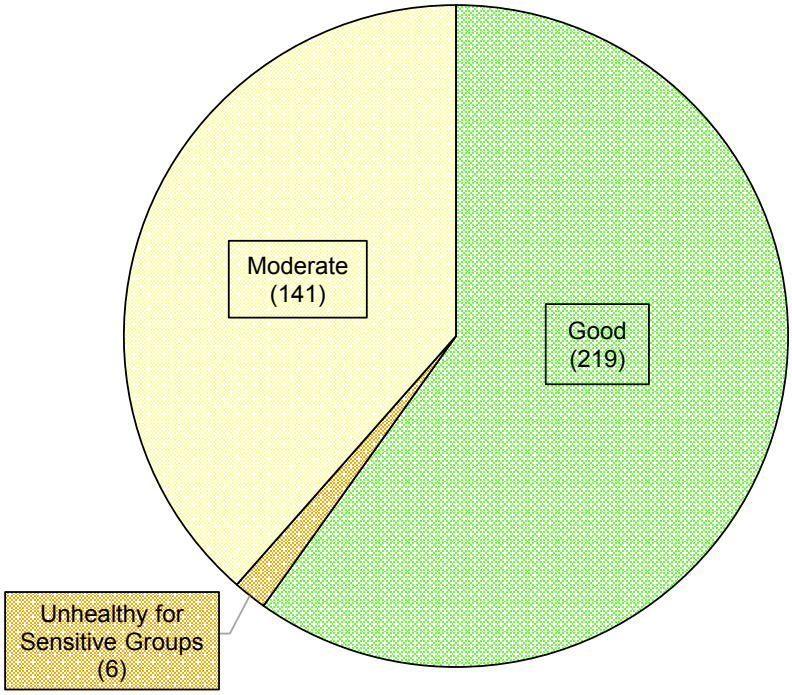


Figure 3-3 shows the distribution of AQI days since 2000. It should be noted that AQI ranges change whenever a NAAQS for a specific pollutant is revised. So even though improvement in AQI days appears to be somewhat erratic, to see how things really have improved, refer to the concentration trend graphs in the individual criteria pollutant reports or in the executive summary. As mentioned above, in 2020 New Jersey had the lowest number of exceedance days since they started being recorded.

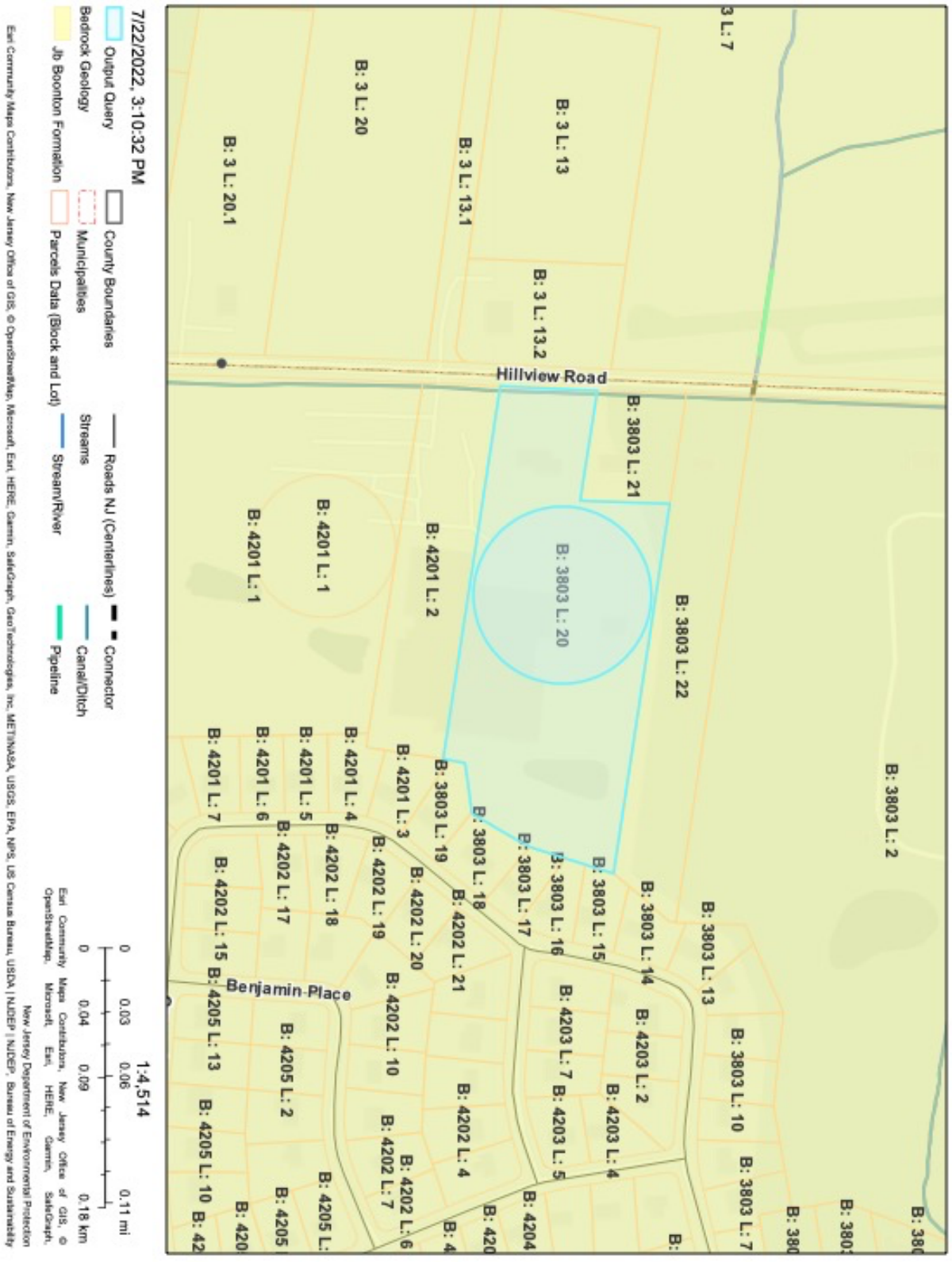
The primary source of air pollution in the project area is motor vehicle and airplane emissions from the local streets, highways and airport. Air quality of the project site and surrounding area is considered good to moderate according to the NJDEP standards.

3. Geology

New Jersey can be divided into four regions, known as physiographic provinces, which have distinct rocks and landforms. The site is located in the Piedmont Province according to the Geologic Map of New Jersey prepared by the Department of Environmental Protection, Division of Science, Research and Technology.

The project site lies within the Piedmont Province, which is an area about 1,600 square miles and makes up approximately one-fifth of the state. It occupies all of Essex, Hudson and Union Counties, most of Bergen, Hunterdon and Somerset, and parts of Mercer, Middlesex, Morris and Passaic. It is mainly underlain by slightly folded and faulted sedimentary rocks of Triassic and Jurassic age (240 to 140 million years old) and igneous rocks of Jurassic age. The Piedmont is mostly a low rolling plain divided by a series of higher ridges. Its width varies from about 16 miles at the New York border to over 30 miles at the Delaware River. The major linear ridges are underlain by igneous rocks. The province slopes from the foot of the Highlands towards its southeastern boundary with the Coastal Plain Province.

The project site is underlain by the Boonton Formation. This formation consists of reddish-brown to brownish-purple, fine-grained sandstone, siltstone, and mudstone; sandstone commonly micaceous, interbedded with siltstone and mudstone in fining-upward sequences mostly 1.5 to 4 m (5-13 ft) thick. Red, gray and brownish-purple siltstone and black, blocky, partly dolomitic siltstone and shale common in lower part. Irregular mudcracks, symmetrical ripple marks, and burrows, as well as gypsum, glauberite, and halite pseudomorphs are abundant in red mudstone and siltstone. Gray, fine-grained sandstone may have carbonized plant remains and reptile footprints in middle and upper parts of unit.


NJ-GeoWeb
B: 3803 L: 2
B: 3803 L: 7
B: 3803 L: 10
B: 3803 L: 13
B: 3803 L: 14
B: 3803 L: 15
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B: 3803 L: 18
B: 3803 L: 19
B: 3803 L: 20
B: 3803 L: 21
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B: 3 L: 7
B: 3 L: 13
B: 3 L: 13.1
B: 3 L: 13.2
B: 3 L: 20
B: 3 L: 20.1
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B: 4203 L: 2
B: 4203 L: 4
B: 4203 L: 5
B: 4203 L: 7
B: 4205 L: 2
B: 4205 L: 10
B: 4205 L: 13
Hillview Road
Benjamin Place
7/22/2022, 3:10:32 PM
Output Query
Bedrock Geology
Jb Boonton Formation
County Boundaries
Municipalities
Parcels Data (Block and Lot)
Roads NJ (Centerlines)
Streams
Stream/River
Connector
Canal/Ditch
Pipeline
1:4,514
0 0.03 0.06 0.11 mi
0 0.04 0.09 0.18 km
Esri Community Maps Contributors, New Jersey Office of GIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, New Jersey Department of Environmental Protection
Esri Community Maps Contributors, New Jersey Office of GIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA | NJDEP | NJDEP, Bureau of Energy and Sustainability

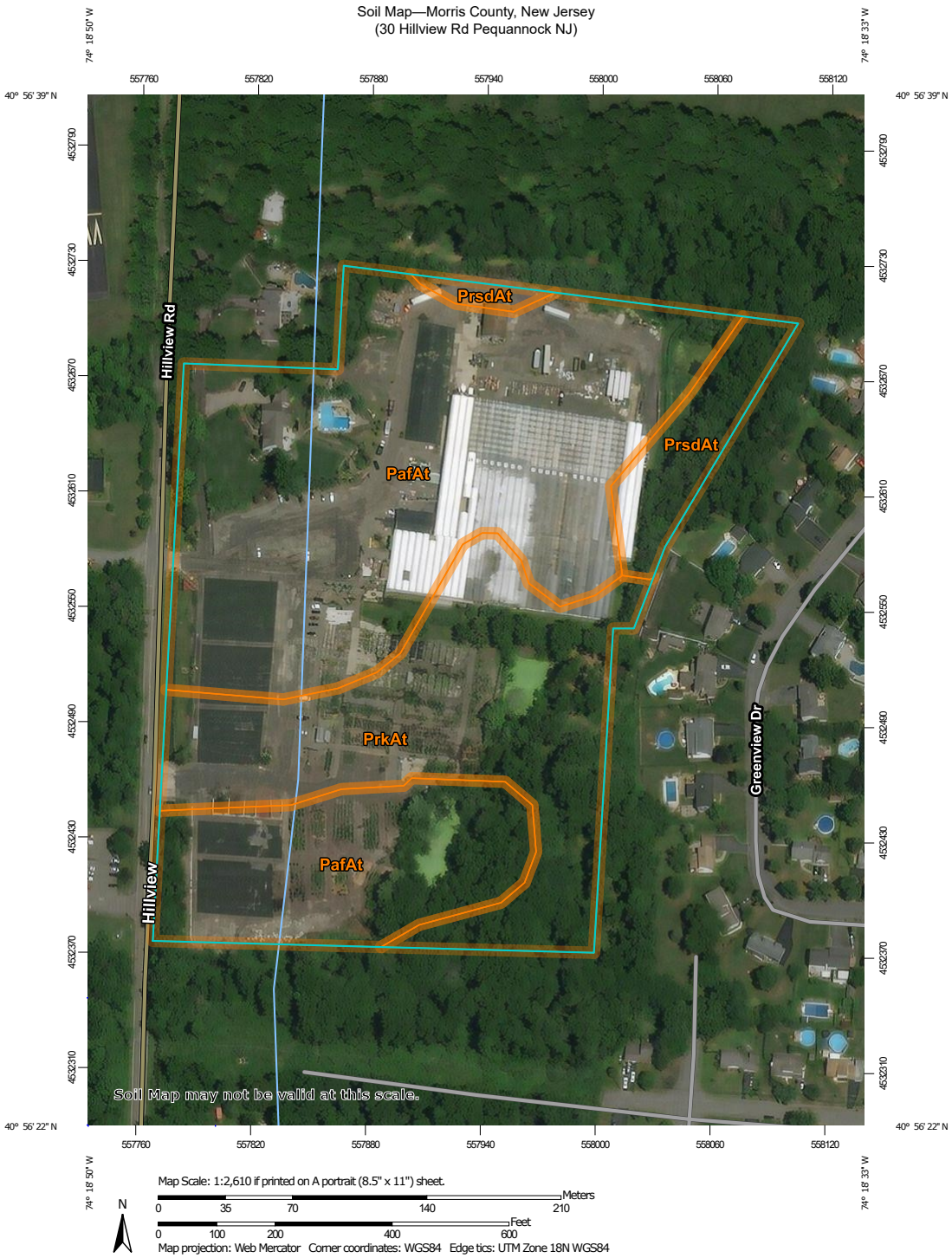
4. Soils

Soils maps were reviewed as prepared by the Natural Resource Conservation Service, NJDEP and the United States Department of Agriculture as available through Web Soil Survey. The site is occupied by three soils (See Figure 5). The following soil types are identified on the site:

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PafAt	Natchaug muck, 0 to 2 percent slopes, frequently flooded	13.7	65.6%
PrkAt	Preakness sandy loam, 0 to 3 percent slopes, frequently flooded	5.9	28.0%
PrsdAt	Preakness dark surface variant sandy loam, 0 to 3 percent slopes, frequently flooded	1.3	6.4%
Totals for Area of Interest		**20.9**	**100.0%**

Natchaug muck, 0 to 2 percent slopes, frequently flooded (PafAt)

This soil is mapped in the northern and southern portions of the property. It has a clayey substratum and frequently flooded. It is a very poorly drained soil and listed as hydric soil. Wetlands were associated with a small area of this soil in the forested area in the southern portion of the property.


Soil Map—Morris County, New Jersey
(30 Hillview Rd Pequannock NJ)
74° 18' 50" W
74° 18' 33" W
40° 56' 39" N
40° 56' 22" N
557760
557820
557880
557940
558000
558060
558120
4532790
4532730
4532670
4532610
4532550
4532490
4532430
4532370
4532310
Hillview Rd
Hillview
Greenview Dr
PrsdAt
PafAt
PrkAt
Soil Map may not be valid at this scale.
Map Scale: 1:2,610 if printed on A portrait (8.5" x 11") sheet.
N
Meters
0 35 70 140 210
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Preakness sandy loam, 0 to 3 percent slopes, frequently flooded (PrkAt)

This soil is mapped in the central and southeastern portion of the property. It is a poorly drained soil subject to frequent flooding. It is listed as a hydric soil, and wetlands are associated with this soil in the southeastern forested areas of the property.

Preakness dark surface variant sandy loam, 0 to 3 percent slopes, frequently flooded (PrsdAt) This Preakness dark surface variant is mapped in the northern and northeastern portion of the property. It is described as a poorly drained soil subject to frequent flooding. It is listed as a hydric soil, however on site hand auger borings did not indicate the presence of hydric soils or wetlands are associated with this mapping unit.

5. Topography

The topography of the site is best described as flat to nearly level. Slopes are generally in the 0 – 2 % range, with some steeper slopes along the tributaries to East Ditch. The highest elevation is in the northeastern portion at approximately 181 feet MSL, while the lowest elevation is associated with the ditch located in the central portion at approximately 174 feet MSL.

6. Surface Hydrology and Water Quality

The site drains to the tributary to East Ditch, which is a tributary to the Pompton River which in turn flows into the Passaic River. The tributary to East Ditch runs along Hillview Road, and a manmade drainage ditch is located in the central portion of the property.

East Ditch is classified in the NJDEP Surface Water Quality Standards, (N.J.A.C.7:9B), as FW-2, Non Trout waterway. Although the ditch does not support trout, it may support other warm water fisheries.

According to the NJDEP's *Ambient Biomonitoring Network (AMNET)* publication, the AMNET program of the NJDEP, Bureau of Freshwater and Biological Monitoring (BFBM), is designed to establish a biological database for use in gauging stream quality throughout the state. This database, in turn, can be an invaluable aid to New Jersey's water quality and watershed planning and management efforts. The BFBM currently conducts monitoring of freshwater rivers and streams in New Jersey.

NJDEP's AMNET monitoring program focuses on populations of macroinvertebrates (benthic communities) present in freshwaters. These biotic communities, which are mainly stationary and cost effective to monitor, integrate the effects of changes in water quality into their life cycle, providing effective indicators of change over time. Results are given in the form of biological and habitat scores. These scores are then used to generalize a rating which indicates the health of the stream. AMNET has a monitoring station for the tributary to the Pompton River located along Ryerson Road in Lincoln Park, southeast of the site, designated as AN0269. This monitoring station provides data from 1993, 1998, 2003 and 2008. Resulting scores and ratings have gone from Fair to Poor.

7. Water Supply

The project site is currently serviced by public water from the Township of Pequannock.

8. Vegetation

An upland forested area located in the northeastern portion of the property. Common vegetation in the forested areas included black cherry (*Prunus serotina),* eastern white pine (*Pinus strobus*), No unique vegetative habitats or specimen trees were identified.

Common vegetation observed in the upland field area central-eastern portion of the property included multiflora rose (*Rosa multiflora*), wine raspberry (*Rubus phoenocolasius)*, Japanese barberry (*Berberis thunbergii*), goldenrods (*Solidago, spp*.), mugwort (*Artemisia*

vulgaris), poison ivy *(Toxicodendron radicans)* and oriental bittersweet vine *(*Celastrus orbiculatus).

9. Wildlife

An inventory of existing avian, terrestrial and aquatic fauna was prepared from a variety of sources. These included actual sightings of species; observation of sign (tracks, scat, calls, bones), existing literature, and available food sources.

The wildlife species found or anticipated to occupy the project area and general vicinity were determined based on the aforementioned sources, as well as an analysis of the interrelationships between the vegetative communities present and their ability to support various fauna. The various species present provide food as well as cover for several wildlife species throughout the year. The fruits, seeds, leaves, twigs, bark, stems and roots all furnish food to different kinds of animals.

Various trees on-site provide a suitable habitat and source of food for both local and transient species. The fruit; buds; twigs and foliage are used by upland gamebirds; songbirds; fur and game mammals; and small mammals. The trees also provide nesting habitat for avian species such as the american robin (*Turdus migraatorius*), black-capped chickadee (*Parus atricapillus*), red bellied woodpecker *(Melanerpes carolinus),* Downy woodpecker *(Dryobates pubescens),* Hairy Woodpecker *(Dryobates villosus*), pileated woodpecker *(Dryobates pileatus),* brown thrasher (*Toxostoma rufum*), house finch (*Carpodacus mexicanus*), mockingbird (*Mimus polyglottos*), northern cardinal (*Cardinalis cardinalis*), rufous-sided towhee (*Pipilo erythrophthalmus*) and wood thrush (*Hyclocichla mustelina)*. A great blue heron *(Ardea Herodias)* and mallard ducks *(Anas platyrhynchos)* were observed in the detention ponds.

Other bird species observed or which may utilize the site at various times of the year include, but are not limited to: red-tailed hawk (*Buteo jamaicensis*), great horned owl (*Bubo virginianus*), dark-eyed junco (*Junco hyemalis*), common grackle (*Quiscalus quiscula*), starling (*Sturnus vulgaris*), blue jay (*Cyanocitta cristata*), tufted titmouse (*Parus bicolor*) and mourning

dove (*Zenaida macroura*).

Other species which are likely present or observed on-site include mammals such as: white tail deer, opossum (*Didelphis marsupialis*), starnose mole (*Condylura cristata*), eastern mole (*Scalopus aquaticus*), woodchuck (*Marmota monax*), eastern cottontail (*Sylvilagus floridanus*), mice (*Peromyscus spp*.) and striped skunk (*Mephitis mephitis*). Citing of a red fox (*Vulpes vulpes*) was observed in the upland forest during field investigations.

The detention facilities, as well as the onsite wetlands and State open waters provide habitat for a variety of amphibian and reptile species. An Eastern garter snake *(Thamnophis sirtalis sirtalis)* was observed in the forested wetland area on site. In addition, green frog *(Rana clamitans melanota)* calls were noted. Other herptile species likely present include Eastern ribbon snake *(Thamnophis sauritus sauritus)*, black rat snake *(Elaphe obsolete obsolete)*, spring pepper *(Pseudacris cruifer crucifer)*, and American toad. *Bufo americanus).*

Habitat for Federal and State endangered or threatened plant and animal species has been defined to include habitat for Federal and State endangered or threatened plant and animal species identified pursuant to the Federal Endangered Species Act of 1973, the New Jersey Endangered and Nongame Species Conservation Act, and the New Jersey Endangered Species List Act.

The Federal definition of endangered species is any species which is in danger of extinction throughout all or a significant portion of its range. The State definition is any species or subspecies of wildlife whose prospects of survival or recruitment are in jeopardy or are likely within the foreseeable future to become so due to any of the following factors:

1. the destruction, drastic modification, or severe curtailment of its habitat;
2. its over-utilization for scientific, commercial or sporting purposes;
3. the effect on it of disease, pollution, or predation;
4. other natural or manmade factors affecting its prospects of survival or recruitment within the State, or
5. any combination of the foregoing factors.

Threatened species means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

No threatened and/or endangered species were noted during the investigation. A data request was made the NJDEP Office of Natural Lands Management for information regarding rare, threatened and endangered flora and fauna. The results are provided in Appendix A of this report. Information provided is based on a search of the Natural Heritage Database and the Landscape Project (Version 3.3).

Table 1 identifies any rare plant species, ecological communities or rare wildlife habitat are documented on site. The search did not identify any rare plant species or ecological communities on site. No Natural Heritage Priority Sites on site were identified. No vernal pools were identified, or rare wildlife species or wildlife habitat on site. No other additional species traced by Endangered and Nongame Species program were identified. Based on a search of the Landscape Project, avian species barred owl *(Stricta varia)* breeding sighting, and Great blue heron, foraging was noted. A live individual sighting of Bobcat *(Lynx rufus)* was noted. This project site is located across the road from the Lincoln Park Airport, which includes a large forested and agriculturally modified wetland area which provides habitat for these species.

Bobcat (*Lynx rufus*) – State Endangered

The Landscape mapping identifies bobcat habitat, a State Endangered species. Habitat fragmentation due to development in northern New Jersey is the biggest impact on the bobcat population. Bobcats are highly sensitive to human activity and dependent upon contiguous tracts of undisturbed land for the health and survival. (NJDEP, Division of Fish and Wildlife, A predictive habitat model for bobcat in northern New Jersey, 2006).

Bobcats typically have a large home range but can be as small as 0.23 square miles (3,000 +/- acres) and as much as 78 square miles (USFWS). Normal home range is 25-30 square miles. Like any species, they require certain pre-requisites for survival. Rollings wrote that the most important requirements were “prey abundance, protection from severe weather, availability of rest areas and cover, and fredom from human intrusion were the big factors in bobcat habitat selection in Minnesota” (Rollings, Clair T., 1945).

Bobcats prefer areas with dense vegetation and lots of prey. They prefer rabbits and hares but are very opportunistic and will eating amphibians, fish, small rodents, birds, eggs, carrion and sometimes deer; when conditions permit.

The project site does have some forested and open areas, however the surrounding residential development limit the probability of the site to be utilized by the bobcat.

Barred Owl (*Strix varia*) - **State Threatened**

The Landscape mapping species based patches identified Barred Owl habitat within the property. The Barred Owl is listed as a State Threatened species.

Considerable populations of barred owls occur in the Highlands region of north Jersey, the Pequannock watershed, High Point State Park, Sterling Forest, Wanaque Wildlife Management Area, the Passaic River basin, and Great Swamp National Wildlife Refuge. The loss, alteration, degradation, and fragmentation of forested habitats are the primary threats facing barred owls in New Jersey. Cutting of dead trees, thinning of forests, and controlled burns may eliminate nesting cavities or render sites unsuitable for breeding barred owls. Barred owls require large expanses of mature forests, and are adversely affected by forest fragmentation. Within fragmented woodlots, barred owls are increasingly vulnerable to human disturbance and predation by great horned owls. The lack of large nesting cavities is often the primary limiting factor for barred owls. Consequently, these owls may nest immediately outside of a wetland or in sub-climax wetland forests if adequate nest sites are unavailable within a mature wetland forest. Barred owls typically shun human activity by avoiding residential, agricultural, industrial, or commercial areas. In northern New Jersey, barred owls favored sites that were at least 500 meters (1640 ft.) from human habitation and had little or no forest clearings or trails. (New Jersey Threatened and Endangered Species Guide, conservewildlifenj.org)

A Letter of Interpretation (LOI) for the project site is currently under review with NJDEP Land Use Resource Protection. As part of this process, the limits of wetlands and.or State open waters will be verified. In addition, the resource value for each wetland area will be determined, using field information, as well as the Landscape Project.

10. Wetlands and Floodplains

Wetlands are defined as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.B9b) and (40 CFR 230.3). Wetlands are currently regulated pursuant to Section 404 of the Federal Clean Water Act and the New Jersey Freshwater Wetlands Protection Act.

In accordance with the New Jersey Freshwater Wetlands Protection Act, and outlined by the New Jersey Department of Environmental Protection (NJDEP), the identification of wetlands is determined by implementing the methodology that is currently accepted by the United States Environmental Protection Agency (USEPA), namely the Federal Manual for Identifying and Delineating Jurisdictional Wetlands dated January 10, 1989. This methodology states that for an area to be considered wetland all three of the following parameters must be present:

1. Hydric Soils
2. A Predominance of Hydrophytic Vegetation
3. Hydrology

The determination of hydric soils in the field is made by the use of a manually operated soil sampler. Then a determination of hydric soils is made by using Munsell Soil Color Charts. Transects are made from the wetlands to uplands to determine the point at which soils no longer were determined to be hydric. Hydric soils are those soils that have a chroma of less than or equal to 1 (when no mottling is present) or a matrix chroma of less than or equal to 2 when mottling is present.

When soils classified as a sand soil are encountered Munsell Soil Color Charts are not used exclusively. In these instances hydric determinations are also made by the presence of one or more of the following conditions: High organic matter content in the surface horizon, the streaking of subsurface horizons by organic matter, or the presence of organic pans.

In situations in which soils exhibit significant coloration due to the nature of the parent material (e.g. red shales) the soils often do not exhibit the characteristic chromas associated with hydric soils. In the above situations the Munsell Soil Color Charts cannot always be used to evaluate the hydric nature of the soil. In these cases their hydric nature according to the Soil Conservation Service (SCS) and the other criteria carry more weight.

Vegetation is classified according to the U.S. Fish and Wildlife Service's Wetland Plants of the State of New Jersey, 1988. The classifications, according to this list are as follows:

Obligate (OBL) – Always found in wetlands under natural (not planted) conditions (frequency greater than 99%), but may persist in nonwetlands if planted there by man or in wetlands that have been drained, filled, or otherwise transformed into nonwetlands.

Facultative Wetland (FACW) – Usually found in wetlands (67%-99% frequency), but occasionally found in nonwetlands.

Facultative (FAC) – Sometimes found in wetlands (34%-66% frequency), but also occurs in nonwetlands.

Facultative Upland (FACU) – Seldom found in wetlands (1%-33% frequency) and usually occurs in nonwetlands.

Nonwetland (UPL) – Occurs in wetlands in another region, but not found (<1% frequency) in wetlands in the region specified. If a species does not occur in wetlands in any region, it is not on the list.

A positive (+) or negative (-) symbol is used with the Facultative Indicator categories to more specifically define the regional frequency of occurrence in wetlands. The positive sign indicates a frequency toward the higher end of the category (more frequently found in uplands), and a negative sign indicates a frequency toward the lower end of the category (less frequently found in wetlands).

According to the Federal Manual for Identifying and Delineating Jurisdictional Wetlands dated January 10, 1989, an area has hydrophytic vegetation, when under normal circumstances more than 50 percent of the composition of the dominant species from all strata are obligate

wetland (OBL), facultative wetland (FACW), and/or facultative (FAC) species. However, when a plant community has less than or equal to 50 percent of the dominant species from all strata represented by OBL, FACW, and/or FAC species, and hydric soils and wetland hydrology are present, the area also has hydrophytic vegetation. (NOTE: These areas are considered problem area wetlands.)

Hydrology is determined by the evidence of water, either visible or indicators that water was present. This is noted by visible factors such as drift lines, high water marks on trees, sediment deposits including encrusted detritus, displacement of leaf litter as the result of water flowage, and drainage patterns. During the growing season, saturated soil samples and/or the water table is noted as evidence of hydrology when they are encountered within 12 inches of the soil surface.

Seasonal high water table information is used, when available, from the Soil Conservation Service. Recent rainfall and/or other precipitation is also considered when evaluating hydrology.

In situations where the native conditions have been altered such as; cleared lands (e.g. agricultural lands), areas where the original soil has been altered (such as formerly plowed or filled lands), certain criteria are given more weight than others due to the lack of reliability of the affected parameter as an indicator.

Freshwater wetlands and State open waters were identified and field delineated and surveyed . The delineation was performed by Linda Gloshinski, Senior Wetland Professional, certified through the Society of Wetland Scientists. A Letter of Interpretation (LOI) for the project site is currently under review with NJDEP Land Use Resource Protection. As part of this process, the limits of wetlands and.or State open waters will be verified. In addition, the resource value for each wetland area will be determined, using field information, as well as the Landscape Project. The NJDEP field investigation was completed on May 11, 2022, and the limits of the wetland and State open waters were verified as shown on the site plans.

Three wetland areas were delineated on site, and noted as WBA, WBB and WBC lines. The WBA wetland area is located in the southern and easternmost portions of the property and are Palustrine Forested Broad-leaved Deciduous (PFO1) wetlands. Dominant species observed include red maple *(Acer rubrum, FAC),* American elm *(Ulmus americana, FACW)* overstory, with

elderberry *(Sambucus nigra, FAC),* spicebush *(Lindera benzoin, FACW)* and multiflora rose *(Roas multiflora).* Hydric soils of 10YR 2/1, no mottles, in comparison to the Munsell Soil Color Chart were noted. Saturated soils in the upper 12' were noted and areas where ponding occurs were noted.

Palustrine emergent (PEM) wetlands and State open waters are associated the manmade ditch that is located in the central portion of the property. This area was delineated as the WBB line. The ditch flows in a westerly direction with a portion piped under the property, discharging into tributary to East Ditch along Hillview Road. This ditch is delineated as the WBB line. Dominant vegetation associated with the wetlands include cattail *(Typha latifolia, OBL)* and soft rush *(Juncus effusus, FACW).* Typical hydric soils were noted as 10YR 2/1, no mottles, in comparison to the Munsell Soil Color Chart. Depth to free standing water was approximately 4" below the surface, with saturated soils at the surface.

The most northern detention facility has a small wetland fringe of Palustrine Scrub-Shrub Emergent (PSS1/PEM) wetlands. It was delineated as the WBC line. Dominant wetland species observed include black willow *(salix nigra),* cattails and soft rush. with the wetlands include cattail *(Typha latifolia, OBL)* and soft rush *(Juncus effusus, FACW).* Typical hydric soils were noted as 10YR 4/1, no mottles, in comparison to the Munsell Soil Color Chart. Depth to free standing water was approximately 8" below the surface, with saturated soils at the surface.

Each wetland area is assigned a resource value, which is determined by NJDEP as part of a Letter of Interpretation application. There are exceptional, intermediate and ordinary resource value wetlands.

A freshwater wetland of exceptional resource value, or exceptional resource value wetland, is a freshwater wetland which:

1. Discharges into FW-1 or FW-2 trout production waters or their tributaries;
2. Is a present habitat for threatened or endangered species; or
3. Is a documented habitat for threatened or endangered species, and which remains suitable for breeding, resting, or feeding by these species during the normal period these species would use the habitat.

A freshwater wetland of ordinary resource value, or an ordinary resource value wetland, is a freshwater wetland**,** which does not exhibit any of the characteristics in (b) above, and which is:

1. An isolated wetland that:

   i. Is smaller than 5,000 square feet; and

   ii. Has the uses listed below covering more than 50 percent of the area within 50 feet of the wetland boundary. In calculating the area covered by a use, the Department will

   only consider a use that was legally existing in that location prior to July 1, 1988, or was permitted under this chapter since that date:

   (1) Lawns;

   (2) Maintained landscaping;

   (3) Impervious surfaces;

   (4) Active railroad rights-of-way; and

   (5) Graveled or stoned parking/storage areas and roads;

2. A drainage ditch;

3. A swale; or

4. A detention facility created by humans in an area that was upland at the time the facility was created regardless of the wetland resource classification of the wetland under this chapter, or the classification of the body of water, as FW-1 or FW-2 trout production, to which it discharges.

A freshwater wetland of intermediate resource value, or intermediate resource value wetland, is any freshwater wetland not defined as exceptional or ordinary.

The resource value for the wetlands associated with the WBA – line is currently under review with the state biologists to determine if such habitat supports barred owl or bobcat. The resource value of the remaining wetland areas were identified as ordinary resource value, with no wetland transition areas (buffers) imposed. No transition areas are imposed adjacent to the State open waters.

The project site lies within the Central Passaic Basin, in an area subject to frequent

flooding. The western boundary of the project site runs parallel and adjacent to East Ditch. The East Ditch has been studied by both FEMA and NJDEP. Flooding mapping dating back to the 1980's has continuously placed this area within flood hazard area and partially within the floodway. The average grade around the site varies between +177 to +179 feet in the NAVD 88 Datum where the 100-yr flood elevation approaches 180.8 feet in the worst case study. A breakdown of the flood elevations is provided in the table below:

Flood Hazard Area Flood Elevation Determination All elevations are in NAVD88 Datum (ft)			
Mapping	10% Annual Chance / 10-yr Flood Event	**Base Flood Elevation** / 1% Annual Chance / 100-yr Flood Event	**NJ Flood Hazard Area Design Flood Elevation**
NJDEP Delineation (December 18, 1984)	179.1	179.7	181.1
FEMA Effective (September 17, 1992)	179.1	179.8	180.8[1]
FEMA Preliminary (August 22, 2017)	180.2	180.8	181.8[1]
Controlling	**180.2**	**180.8**	**181.8**

1. Per NJ FHA Control Act Rules, NJFHADFE = BFE + 1 FT

In addition, per the worst case study (FEMA Preliminary) an approximately 250 foot swath running along the western property line is within the floodway. Per NJDEP regulations, only limited above-grade improvements are allowed within floodway (i.e vehicular guardrails, utility poles, etc.)

Finally, East Ditch and its tributaries have a 50 foot wide riparian zone measured from the top of the bank of the stream. Some previously disturbed areas will be redeveloped in this area in compliance with the Flood Hazard Area Control Act Rules.

11. Light Levels

Existing light levels at the sight are minimal and limited to adjoining residential development.

12. Noise

The project site is located in an suburban atmosphere typical of most of Pequannock Township. Ambient noise conditions onsite are mostly associated with surrounding residential uses as well as local traffic conditions.

Onsite noise levels were not measured but may be estimated by the use of ambient sound level study charts taken from the *Environmental Impact Assessment* by Larry W. Canter, as shown in Table 1.

Table 1 - Typical Day-Night Noise Levels in Urban Areas in the United States

Description	Typical Range (dB)	Average (dB)	Avg. Pop. Density people/sq. mile
Quiet suburban residential	48-52	50	630
Normal suburban residential	53-57	55	2,000
Urban residential	58-62	60	6,300
Noisy urban residential	63-67	65	20,000
Very noisy urban residential	68-72	70	63,000

Classification	
Minimal Exposure	55 or less
Moderate Exposure	55-65
Significant Exposure	65-75

Source: *Environmental Impact Assessment*. Canter, Larry W.

According to the Pequannock Township website, the Township has an area of about 7 square miles, with a population 14,506, resulting in a population density of approximately 2,072 persons per square mile. Based on population, the existing conditions of the project site are most

similar to normal suburban residential with noise levels corresponding to approximately 50 dB or below. However, with it being located across the street from the privately owned Lincoln Park Airport, it is more in line with urban and noisy urban noise levels at times.

13. Historical Sites and Archeological Features

According to the Pequannock Township Master Plan, Pequannock Township contains a rich historic heritage that includes both older character-rich buildings and bucolic farming landscapes encapsulating the Township's unique community character and rich history. The 2012 Open Space and Recreation Plan notes Pequannock's earliest settlement dating back to before the Revolutionary War. The Township of Pequannock's history is preserved by its early farmhouses and buildings that capture its growth during the Nineteenth century as a transportation hub that featured railways, roadways, and the feeders of the Morris Canal.

The Historic Resources Inventory does not indicate the presence of historic structures on or in close proximity to the project site. No old structures or artifacts were observed or known to exist on the site.

III. PLAN AND DESCRIPTION OF DEVELOPMENT

The applicant, Hillview Med has proposed a cannabis cultivation and processing and manufacturing facility. The project involves the construction of a 196,534 SF primary facility (173, 122 SF of cultivation, 13,973 SF unfinished space to be fitted out for processing in the future, and 9,439 SF of office space) as well as a 7,495 SF utility building (Powerhouse), and a Switchyard. Approximately 141,767 SF of the greenhouse portion of the primary facility will be wet flood-proofed.

The property previously operated as a garden center since 1973, with a 119,936 SF greenhouse, three (3) irrigation and detention basins, and a single family residence. The majority of the property consists of gravel and/or asphalt. The single family dwelling will remain, while

the remaining man-made improvements will be removed within the limit of disturbance as noted on the site plans. There will be a net reduction of 94,365 SF in motor vehicle surfaces.

The cannabis license permitted in the Township is for a cannabis cultivator, such as Hillview Med. No license for any other class of cannabis establishment, including cannabis retailers, manufacturers, distributors, wholesalers, testing facilities, or delivery services, are available. Cultivation of cannabis is a permitted use in pre-existing farm uses in the AG Zone district and only where the following conditions are met (Code Section 360-47(U))

The project has been designed to meet all the current regulations for the zone. A summary is as follows:

- All bulk requirements will be met.
- A 7 foot tall fence is proposed, complying with the security requirements.
- The cultivating facility will provide an air-treatment system with sufficient odor-absorbing ventilation and exhaust system such that any odor generated inside the facility is not detectable by a person of reasonable sensitivity at the property line of the subject property. The applicant shall submit an annual odor-monitoring report for the life of their applicable state permit.
- Noise control. All cannabis cultivating operations shall operate in compliance with state and local noise laws and regulations.
- Generator. The cannabis cultivating operations will be equipped with a back-up generator which shall be sufficient in output to maintain all operating and electronic security systems in the event of a power failure.
- Lighting. No light generated by any cannabis cultivating/growing structures shall result in measurable light changes at the nearest property boundary to each structure. Interior black out shades will be used in the greenhouse when interior lighting will be used.
- Future processing is proposed, as accessory to cannabis cultivation. No more than 20% of the cultivation facility will be used for processing.

The proposed development exceeds the threshold for a major development and thus must satisfy NJAC 7:8a and §308 of the Pequannock Township Code. Stormwater runoff quantity requirements will be addressed by re-using the existing irrigation and detention basins and constructing a proposed porous pavement basin in the truck loading area to the west of the primary facility. The porous pavement system will be designed in accordance with the NJDEP Stormwater Regulations (N.J.A.C. 7:8) and will satisfy the green infrastructure requirement

The proposed greenhouse will be wet-flood proofed. Wet flood proofing will be achieved using flood vents installed throughout the perimeter wall of the greenhouse. The flood vents will allow the free and continuous entry and exit of floodwater in a flood event thereby eliminating buoyancy forces and hydrostatic pressures on the building.

The proposed project has been designed to conform with the Township Zoning Ordinances and Master Plan requirements. Various engineering and site planning techniques, as discussed throughout this report, have been incorporated in the redevelopment of the site to be compatible with the natural features and environmentally constrained areas. The plans were developed to minimize potential environmental damage.

IV. ASSESSMENT OF THE ANTICIPATED IMPACT OF THE PROJECT

1. Land Use

The proposed subdivision has been designed in accordance with the Township Land Use Ordinance requirements for the R-1 Residential Zone. The land use of the site will be altered through the implementation of the project. Portions of the land will be converted from undeveloped land to a single family residences and associated features. This land use is in conformance with the zoning of the area, and the surrounding land use in this area of the Township.

2. Air Quality

The proposed project construction activities will have an minor impact on the air quality of the site and neighborhood, and temporary in nature. This is a result of the fugitive dust emissions and the operation of diesel powered equipment.

The cultivating facility will provide an air-treatment system with sufficient odor-absorbing ventilation and exhaust system such that any odor generated inside the facility is not detectable by a person of reasonable sensitivity at the property line of the subject property. The applicant shall submit an annual odor-monitoring report for the life of their applicable state permit.

3. Geology

Impacts to the existing geologic character of the area are negligible as the project is a redevelopment and will not require blasting .

4. Soils

A number of soil erosion and sedimentation controls will be implemented in accordance with the New Jersey Standards for Soil Erosion and Sediment Control, and will be in place prior to any major disturbance of soils. Due to the flat nature of the property, grading will be minimal. These practices will remain in place until permanent protection is established.

5. Topography

The property is flat will minimal to no impacts to the local topography.

6. Surface Hydrology and Water Quality

There are several factors associated with the development of a site that may affect either surface or groundwater quality. These factors are siltation of surface water bodies or wetlands

during site development; introduction of nonpoint source contaminants to the surface water system; and introduction of nonpoint source contaminants to the groundwater.

Potential nonpoint source pollutants to surface water bodies associated with this type of land use typically stem from the roadway and overland runoff. Such runoff may include petrochemicals, salts, and organic compounds including nitrogen and phosphates. Adherence to an approved soil erosion and sediment control plan will help to offset any runoff effects.

No filling of the wetlands or state open waters are proposed. Rooftop water will be discharged into the basin on site, which does not require pre-treatment. A detailed discussion of the stormwater management is provided in the Surface Water Management Plan prepared by Darmofalski Engineering Associates, Inc.

7. Water Supply

The project will be serviced by municipal water supply. The primary source of water for the Township is groundwater from the Buried Valley Aquifer, which is obtained from three wells located in the northern section of the Township. The water system is currently supplemented during high demand periods with finish water from two interconnections with the City of Newark's water transmission aqueduct that runs through the Township.

8. Vegetation

The proposed construction consists of redevelopment of the property. The areas of disturbance consist of gravel, paved, and previously disturbed areas. No vegetation removal is proposed, with landscaping to be installed in front of the principal facility and throughout the parking area. The forested areas will be preserved, providing habitat benefits to wildlife as well as providing screening of the development from an aesthetic standpoint of reducing light, wind and to a lesser extent noise.

9. Wildlife

As previously noted, the Natural Heritage Data Base search did not identify any rare plant species or ecological communities on site. No Natural Heritage Priority Sites on site were identified. No vernal pools were identified, or rare wildlife species or wildlife habitat on site. No other additional species traced by Endangered and Nongame Species program were identified.

Based on a search of the Landscape Project, avian species barred owl *(Stricta varia)* breeding sighting, and Great blue heron, foraging was noted. A live individual sighting of Bobcat *(Lynx rufus)* was noted. This project site is located east from the Lincoln Park Airport, and lands which include large forested and agriculturally modified wetland areas which provides habitat for these species. The property provides habitat for Great blue heron, and a sighting at the detention facility was noted. The site will continue to provide such habitat for the heron. However, it is very unlikely that the project site provides habitat for bobcat and barred owl. The Letter of Interpretation (LOI) is currently under review, and will make the final determination as to whether or not habitat is present. The forested areas present are small in size, and located in a narrow band between development. It is unlikely such species would be present due to the closeness to humans and size limitations.

The CHANJ project maps wildlife corridors, and identifies key areas for wildlife movement. The project site is located in Corridor 3, 4 and 5, with 5 being the most difficult for wildlife movement. To the west are areas where movement is less constricted, the corridor is identified as a stepping stone, where wildlife moves to larger core areas (See Figure X).

No clearing of vegetation for the proposed project is proposed. Therefore no displacement of terrestrial populations currently inhabiting or using the site on both a temporary and permanent basis. Some wildlife species will be displaced during construction before relocating to remaining vegetation and new habitats. This short term effect will be a decrease in the total number of individuals and species until the new equilibrium is established., and construction is complete.

Therefore, impacts to any endangered or threatened species are not expected.

10. Wetlands and floodplains

As previously stated, three freshwater wetlands were identified on site, along with and state open waters associated with ditches and detention basins. There will be no impacts to wetlands as a result of the construction of the proposed project. The stormwater outfalls will be discharging to the State open waters and are designed to meet the criteria for a Freshwater Wetland General Permit 11.

Under the General Permit 11 for stormwater outfall structures, the NJDEP shall issue a general permit 11 authorization with the following conditions:

1. The activities disturb no more than one quarter acre of freshwater wetlands, transition areas, and/or State open waters, including both temporary and permanent disturbance/ ***There are 5 outfall structures proposed, disturbing well under 1/4 acres of State open waters.***
2. The area disturbed during construction of a conveyance structure is no wider than is necessary to comply with the United States Occupational Safety and Health Administration safety standards for excavations, set forth at 29 CFR Part 1926, Subpart P. ***This design criteria is being met.***
3. The amount of rip-rap or other energy dissipating material placed is the minimum necessary to prevent erosion, and shall not exceed 10 cubic yards of fill per outfall, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90. ***Each outfall structure has been designed to not exceed the 10 cubic yard allowance.***

For any excavated area in the State open waters, the following requirements have been followed:

1. The excavation shall be backfilled to the preexisting elevation;
2. The uppermost 18 inches of the excavation shall be backfilled with the original topsoil material if feasible; and

3. The wetland and/or transition area above the excavation shall be replanted, in accordance with applicable BMPs, with appropriate indigenous species. ***Between the proposed greenhouse and existing central ditch, a wetland seed mix is proposed.***

The redevelopment of the property has been designed to meet the criteria for a Freshwater Wetland Transition Area Waiver for Redevelopment. The NJDEP will authorize such a waiver for areas significantly disturbed area if all of the following conditions are met:

1. The area of proposed activity is significantly disturbed**,** so that it is not functioning as a transition area at the time of application, for example, the area is covered by an impervious surface such as pavement, by gravel or paver blocks, or by a deck that is less than five feet off the ground. ***The project involves the redevelopment of areas that are paved, gravel or consist of a building;***
2. The significant disturbance in the area of proposed activity was legally existing in the transition area prior to July 1, 1989, or has been permitted under this chapter. ***The project was developed around 1973, prior to the July 1, 1989 requirement;***
3. No additional disturbance is proposed that would expand the disturbed area. ***No additional disturbance is proposed;***
4. Where practicable, any remaining disturbed portion of the transition area shall be planted with indigenous plants that are beneficial to the wetland and protected from future development by a conservation restriction that meets the requirements at N.J.A.C. 7:7A-12. ***Between the proposed greenhouse and existing central ditch, a wetland seed mix is proposed.***

The project involves the redevelopment of 4,916 SF of the 50 foot wetland transition area and has been designed to meet current NJDEP criteria for the Transition Area Waiver for Redevelopment. An application is to be submitted for approval in September.

An Individual Flood Hazard Area Permit will be required for the project. The permit will cover both activity specific requirements (i.e construction of a building, parking area, outfall control structures etc.) and area specific requirements (channels, riparian zones, etc.). Most significantly the flood storage displacement requirements of the Central Passaic Basin. A detailed

breakdown of the requirements will be included in the Engineering Report of the submission to the NJDEP.

11. Light Levels

It is not anticipated that there will be any sky glow or other off-site adverse impacts from any lighting sources proposed for this site. Black out shades will be used in the greenhouse when interior grow lighting is required.

12. Noise

Impacts associated with implementation of the project are short term in nature. Short term impacts are associated with normal construction activities. Noise at a construction site varies relative to the particular operation in progress. There will be noise associated with the demolition and construction phases of the project.

Although an increase in noise levels is anticipated during construction, these will be short term and intermittent. Construction equipment is required to comply with Federal Noise Control Standards. Noise impacts will be reduced by employing the following noise abatement measures typically used during construction:

1. Proper maintenance of equipment to minimize noise emissions;
2. Use of properly muffled equipment;
3. Efficient air intake silencers;
4. Proper cooling system operations; and
5. Avoiding prolonged idling of equipment.

Construction activity will take place during normal working hours, in accordance with local ordinances.

13. Historical Sites and Archeological Features

As previously stated, the site was referenced on the Pequannock Township Open Space and Historic Sites Inventory Mapping, and is not identified as being in a Historic Site. No old structures or artifacts were observed or known to exist on the site. Therefore, the proposal should have no impact to historic sites or significant archeological features

15. Sewage Disposal Facilities

The project will be serviced by the Township sewerage system. The Township is service by Two Bridges Sewerage Authority, which has capacity to accommodate the project.

16. Solid Waste Disposal

Solid wastes generated from the project, in the short term, will predominately be construction material. During construction, building debris will be retained onsite in roll-off containers for transportation off-site.

17. Hazardous Waste Disposal

No hazardous waste is expected to be generated by the proposed facility.

18. Traffic

JDA Associates has prepared a Traffic Impact Statement (dated August 30, 2022) to assess any impact to local traffic. The reader shall refer to that report for further information.

20. Fiscal Impact and Demography[AP1]

This facility will replace the existing Gro-Rite Garden Center, but will continue the historic agricultural use on this site. The proposed facility will provide approximately 100 jobs, compared to 50 employees employed by the garden center.

Per Township of Pequannock Code §120-1, a transfer tax of 2% will be imposed on receipts of sale of cannabis from this facility in addition to the property tax collected for the tract.

When the facility is completely build out per site plan it is estimated to provide a revenue of $50 million dollars per annum dependent upon market rates of goods sold.

21. Statement of Impact on Resources

The following is a list of irreversible or irretrievable commitment of resources and unmitigated impacts involved in the proposed project should it be implemented.

- Minor impacts to State open waters as a result of the installation of the stormwater outfall structures
- Minor soil erosion due to grading activity.
- Minor changes in local topography.
- Temporary normal construction related noise.
- Minor increase in vehicular traffic.

In considering the environmental impacts of any project, there are generally certain impacts, which are unavoidable, but which may be expected based on the zoning of the property. Based on the zoning, the only viable alternative in most instances is to attempt to mitigate impacts to the greatest extent possible. When considering the zone, and that the project is redeveloping a site that was disturbed, the impacts are very minimal. The proposed project is within the footprint

of the existing disturbance, and will reduced impervious surface significantly.

V. STATEMENT OF ALTERNATIVES

As in any development proposal, alternatives to the proposed site layout have been investigated. This project has been designed to be consistent with and comply with the Township of Pequannock, specifically the -1 District. The plan minimizes impacts to the environmental resources and is a redevelopment project.

Another alternative other than that which has been proposed is the "no build" option of leaving the site in its existing condition as a garden center.

VI. STATEMENT OF PERMITS REQUIRED

The following is a list of licenses, permits, etc. to be obtained by the applicant for the construction of the proposed project.

Approvals	Agency	Status
Site Plan Approval	Pequannock Twp.	Pending
Soil Erosion & Sediment	Morris Co. SCS	Pending
Construction Permit	Pequannock Twp	Pending
Transition Area Waiver for Redevelopment	NJDEP Division of Land Resource Protection	To be submitted September 2022
Individual Flood Hazard Permit	NJDEP Division of Land Resource Protection	To be submitted September 2022

VII. REFERENCES

The following sources were utilized in the preparation of this Environmental Impact Statement:

Canter, Larry W. *Environmental Impact Assessment*. Irwin McGraw-Hill, Boston, MA. 660 pp. 2nd Edition. 1992.

Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe. *Classification of Wetlands and Deepwater Habitats of the United States.* FWS/OBS-79/31, US Fish and Wildlife Service, Office of Biological Services, Washington, DC. 1979..

Federal Interagency Committee for Wetland Delineation. 1989. *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Washington D.C. Cooperative technical publication.

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Pequannock Township, *Land Use Ordinance and Master Plan.*

Newcomb, Lawrence. *Newcomb's Wildflower Guide*. Little, Brown and Company, Boston, 1977.

NJDEP, Division of Land Use Regulation. 1992. *N.J. Freshwater Wetlands Protection Act Rules, Amended October 6, 2008*: N.J.A.C. 7:7A-1.1 et seq. New Jersey Register, Trenton, New Jersey.

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NJDEP. *2014 Air Quality Report*. NJDEP Bureau of Air Monitoring. 2014.

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Petrides George A. *A Field Guide to Trees and Shrubs*. Houghton, Mifflin Company, Boston, 1972.

Reed, P.B., Jr. *National List of Plant Species that Occur in Wetlands; 1988, New Jersey*. U.S.D.I. Fish and Wildlife Service. 1988.

Tiner, R.W., Jr. *Wetlands of New Jersey*. U.S. Fish and Wildlife Service, National Wetlands Inventory, Newton Corner, MA. 117 pp. 1985.

APPENDIX A

NATURAL HERITAGE LETTER

State of New Jersey
MAIL CODE 501-04
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE PARKS, FORESTS AND HISTORIC SITES
OFFICE OF NATURAL LANDS MANAGEMENT
501 East State Street
P.O. Box 420, Mail Code 501-04
Trenton, NJ 08625-0420
Tel. (609) 984-1339 • Fax (609) 984-0427

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

SHAWN M. LATOURETTE
Commissioner

April 12, 2022

Linda Gloshinski
LRV Associates
425 Old Boonton Road
Boonton, NJ 07005

Re: HillviewMed - 30 Hillview Road, Pequannock, NJ 07035
Block(s) - 3803; 4201, Lot(s) - 20; 1 & 2
Pequannock Township, Morris County

Dear Ms. Gloshinski:

Thank you for your data request regarding rare species information for the above referenced project site.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.3) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the map(s) submitted with the Natural Heritage Data Request Form into our GIS. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the immediate vicinity of the site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

Beginning May 9, 2017, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.3. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive web application at the following URL,

https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=0e6a44098c524ed99bf739953cb4d4c7, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

For additional information regarding any Federally listed plant or animal species, please contact the U.S. Fish & Wildlife Service, New Jersey Field Office at http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,

Robert J. Cartica
Administrator

c: NHP File No. 22-4007483-24567

Table 1: On Site Data Request Search Results (6 Possible Reports)

Report Name	Included	Number of Pages
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.3	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves								
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
Mammalia								
	Bobcat	Lynx rufus	Live Individual Sighting	4	NA	State	G5	S2

Table 2: Vicinity Data Request Search Results (6 possible reports)

Report Name	Included	Number of Pages
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites within the Immediate Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.3	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Amphibia								
	Blue-spotted Salamander	Ambystoma laterale	Occupied Habitat	4	NA	State Endangered	G5	S1
Aves								
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Brown Thrasher	Toxostoma rufum	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Cooper's Hawk	Accipiter cooperii	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Red-shouldered Hawk	Buteo lineatus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
Mammalia								
	Bobcat	Lynx rufus	Live Individual Sighting	4	NA	State Endangered	G5	S2

APPENDIX B

RESUME OF PREPARER

LINDA GLOSHINSKI

POSITION: Professional Wetland Scientist

EDUCATION: B.A. Geography, 1986
Montclair State College

CONTINUING PROFESSIONAL EDUCATION:

MCRP Rutgers University
Environmental Planning
18 credits completed

Wetland Construction and Restoration
Wetland Training Institute

Understanding Soil Conditions of Wetlands
New Jersey Freshwater Wetland Regulation
Cook College Continuing Education Program

ASSOCIATIONS: Society of Wetland Scientists

CERTIFICATIONS: Professional Senior Wetland Scientist (Certification No. 001003)
Ecologist, Environmentally Sensitive Areas Protection Plan - NJDEP
Bureau of Discharge Prevention

PROFESSIONAL BACKGROUND

Ms. Gloshinski has extensive experience in the areas of wetland identification and delineation, environmental impact analysis and assessment, and permit acquisition and compliance. She has also provided Expert Testimony to various municipalities regarding environmental studies she performed.

Ms. Gloshinski is responsible for the completion of all projects as well as administrative work involving business development, cost tracking, and coordination of work with clients and subconsultants. She has over 36 years experience in the environmental field. Ms. Gloshinski's prior experience in the environmental field has included working for consulting environmental and engineering firms , and she has been involved in managing several large highway and private development projects involving wetland delineation, wildlife assessments, environmental impact assessments, environmental permitting and wetland mitigation design.

Ms. Gloshinski is cognizant of the New Jersey Freshwater Wetland Protection Act Rules and Regulations, as well as the U.S. Army corps of Engineers regulations under Section 404 of the Clean Water Act. She has the expertise and experience in preparing Letter of Interpretation Applications, General Permits, Individual Freshwater Wetland and State Open Water Fill

Permits, and Transition Area Waivers. She has been involved in the preparation of wetland mitigation plans, including site selection, planting design and specifications, as well as preparing Monitoring and Maintenance reports for Wetland mitigation projects. She also has worked with several clients in the due diligence phase of real estate transactions to identify environmental constraints that may impact the development potential and value of the property. Ms. Gloshinski has established contacts with the regulatory community at both the Federal and State Levels through her involvement in various projects over the years.

Projects have involved clients from County and Local governments agencies; private industry; real estate developers; and single family home owners.

Ms. Gloshinski also works with the Land Conservancy of New Jersey where she utilizes her land use background and assists the Land Trust as well as several towns in preserving open space and farmland. This work involves grant submissions to NJDEP Green Acres Program, as well as County Open Space Programs. She has prepared Recreation and Open Space Inventories (ROSI's) for various towns as part of the grant submissions. She also works with the State Agricultural Development Committee on farmland preservation projects. In addition, she has worked with the Highlands Council, obtaining approvals for a Highland Permit 1 for stream restoration and habitat enhancement work.

PROJECT/CLIENT LIST:

- Morris County Engineering Department - The project involved the replacement of Bridge 24 on Intervale Road, Parsippany-Troy Hills Township, Morris County. LRV Associates conducted a delineation of freshwater wetlands and State Open Waters, and preparation of a General Permit No. 10 for the replacement of the bridge.

- Essex County Engineering Department - Project involves the replacement of Bridge 0701-465 over Deepavaal Brook in Fairfield Township. Field work involved the delineation of freshwater wetlands and State Open Waters. A General Permit No. 10 was prepared for submission with the Flood Hazard Area to NJDEP. LRV Associates also assisted with the Flood Hazard Area Environmental Report. A mitigation plan was developed for the replacement of trees impacted by the project.

- Morris County Engineering Department - The project involved the replacement of Bridge 1401-368 in Parsippany-Troy Hills Township, Morris County. LRV Associates conducted a delineation of freshwater wetlands and State Open Waters, and preparation of a General Permit No. 10 for the replacement of the bridge.

- Diversion Application to the State House Commission - This project involved the submission of an application to the State House Commission for a diversion of a small part of a park without prior permission. LRV Associates was involved in the Scoping Hearing, and prepared the Pre-Application and Final Application to the State House Commission. An analysis of unpreserved land in the Township was performed and a parcel that exceeded the Green Acres requirements was identified and utilized as compensation for the diversion.

- Picatinny Arsenol, Rockaway, NJ - Worked with engineers in the development of a maintenance facility. The project involved wetland delineation and Individual Transition Area Waiver for the project. Analysis of previously disturbed areas were performed , and a Transition Area Waiver for Redevelopment was prepared to minimize impacts to the adjacent Exceptional Resource Value Wetlands and the 150 foot wetland transition areas.

- Morris County Park Commission - Environmental Consultant on various projects for the MCPC involving trail development and park improvements. Linda worked with the MCPC at the Bamboo Brook Park in Chester Township as part of the historic restoration of the gardens designed by Martha Brooks Hutchenson. Projects involved wetland delineation and freshwater wetland permitting in accordance with NJDEP criteria.

- NJ Department Of Transportation - Widening of Route 23 - Project involved a wetland delineation from the Riverdale Circle to the West Milford bridge over the Pequannock River. An Individual Freshwater Wetland Permit was prepared for the project, and a Wetland Mitigation Plan was developed in accordance with NJDEP guidelines.

- Massachusetts DPW - Route 57 Extension Agawam, MA: Project involved the delineation of wetlands in the proposed Route 57 corridor. Documents were prepared in accordance with NEPA guidelines, including a WET (Wetland Evaluation Technique) computer analysis, to evaluate the project wetlands functions and values. Wetland Mitigation plans were developed, creating wetland areas to mitigate those functions and values to be impacted by the proposed project.